

**COLOUR IN ARCHITECTURAL SPACE AND ITS IMPACT ON THE USER:
Case Studies - Contemporary Office Spaces in Sri Lanka**

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Dissertation

**Submitted to the Department of Architecture of the
University of Moratuwa in partial fulfilment of the
Requirements for the degree of
Master of Science
In
Architecture**

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University of Moratuwa

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2005**

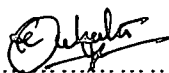
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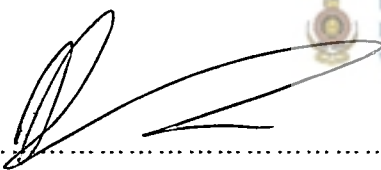
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Declaration

I declare that this dissertation represents my own work, except where due acknowledgement is made, and that it has not been previously included in a theses, dissertation or report submitted to this university or to any other institution for a Degree, Diploma or other qualification.



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ACKNOWLEDGEMENTS

This dissertation was made a reality due to the collective support and encouragement received from many.

First and foremost I wish to thank M.Sc year masters (year one) and Course Coordinators Archt. Vidura Sri Nammuni and Archt. Prasanna Kulatilaka, Department of Architecture, University of Moratuwa, for their valuable guidance in the initial stage.

To My supervisor – Dr Harsha Munasinghe, Senior Lecturer, Department of Architecture, University of Moratuwa, for supervising me and setting me in correct track.

To Archt. Arosh Gamage, Archt Madura Prematilake, Archt Jayanayh Silva, Archt. Vinod Jyasinghe for structuring case studies.

Special thanks goes out to, building management, the staff and the customers of HNB - Boralesgamuwa, Hem Tours, Jetwing Travels and Sun Street for providing me necessary data, discussions, & granting permission to get photographs the buildings

There were many others who were beside me during this journey. Among them I am greatly behold to

My colleagues, Roshini Akka, Manju Akka, marini, aishani, Manori, Rasanga, shehla and my best friend Lakmali for all helps and advices.

Last but not least to, parents and family members for helps in vary ways in the completion of this dissertation.

Use of Colour in Architectural Space and Its Impact on the Use: Case Studies - Contemporary Office Spaces in Sri Lanka

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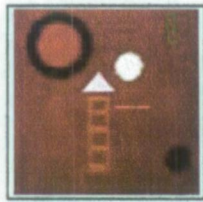
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ABSTRACT



"Colour in particular is so much part of our lives that we often take it for granted - until such time as we are deprived of it." Parikh A. (1996) p 13

All natural and built environments are colourful. We cannot find a place without colours. Colour gives life and meaning to the space. Sometimes colour may hide the reality and sometimes colour improve the reality Colour defines boundaries, progression, and orderliness. Benefits of colour are wider in present. It may widen even more in the future. Power of colour can be used as to give messages, healing purposes etc... In addition, colour is a one of the represents of emotions. In particular, occasions colour express the required meaning and it may impact the mood of people.

Today, most buildings tend to use colour. But clients wish, inconsistency of using colours, less knowledge of colour psychology etc, may cause less meaningful architectural spaces in regard to the use of colour. It can be seen that the use of bright hues in order to attract people and gain attention is the most popular use of the concept of colour in contemporary buildings. This practice may be questionable in light of the knowledge that is available on the critical impact of colour.

It can be seen that colour usage does not quite often reflect the correct architectural quality and can have negative impacts on the user. This issue can become more critical and may even effect and damage the architectural, historical and economic structure of the country in the long run.

Thus, it is seen as a responsibility of the architect to think deeply about the present trend and actually be aware of the impact of colour from the beginning stages of the design.

This study is limited to four different contemporary Sri Lankan offices chosen as case studies to examine the use of colour in architectural space, and to determine the impact of the use of colour in those working environments. It was found through the study that no matter what architectural concepts lay behinds the colour usage; one of the most important factors was that it had to create a positive impact on the users of the environment in ordered for it to be successful.



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INTRODUCTION

1) Background to the Study

"Colour rather than shape is more closely related to emotion." David Katz (1992)

Colour is a powerful element that closely relates with emotions. In 'Architecture' colour acts in the same way. It changes the space in a positive or a negative way. That is, it effects of, perceptions of the space, and the way the user experiences it.

So colour is used to create many 'moods' and 'behaviour patterns'. These 'moods' or 'behaviour patterns' can help to uplift the spirits to create a warm friendly atmosphere or can work negatively.

Some of the effects of colours are well known and are accepted by many people. In fact, those effects have been subjected to serious research and experiments and are being proven scientifically. These have been clearly displayed in systems like Mansell, Pantone, Hesselgren, ACC, CIE, True-match, DIN 6164, Osrwald, Johannes Itten system etc.

Earlier colour was commonly used in architecture as a decorative item, as a part of the detailing. The trend is beginning to change and colour has begun to be used in architecture in perceptually and conceptually meaningful ways.

2) Observation

Architectural space emerges as a product of human habitation. Therefore, architecture is a social - spatial relationship. An architectural product is successful when it relates to its meaning. Colour is one of the elements that help to make meaningful architectural spaces for the user.

The use of colour is seemed to be unsuccessful due to reasons such as ignorance of 'colour psychology' and inconsistency in the use of colour. Architects use colours with a purpose, to achieve a certain architectural quality. Building owners However tend to used to highlight their buildings within in the context by using colours.

When considering the Sri Lankan context, colour is hardly used successfully. As a result, meaningless colour usage inappropriate to the user and function has emerged.

3) Criticality

The office going people, spend most of their daytime in office spaces. Thus this space can bring about a monotonous boredom or psychological imbalance in the user. Even though it is not solely due to colour, but mainly also to form, shape, scale, lighting, textures etc colour creates an immense impact.

Therefore, this study is critical as inconsistency in the use of colour and negligence in colour psychology with its negative impact rapidly growing in today's architectural field. In a way it seriously creates an impact on the emotions of the user with regard to the function and its efficiency.

4) Aim and Objectives of the Study

This study aims to examine how colour could contribute to enhance the meaning of architectural space in terms of its users comfort.

- Objective one is to explore how the power of colour is used in contemporary offices in Sri Lanka
- Objective two of the study is to examine effects of colour.
- Objective three is to predict, how colour impacts the user behaviour in three-dimensional space.
- Furthermore, this study facilitates the identification of the required degree of using and controlling colour in architectural space.

5) Methodology

This study focuses on, how colour can be used to reduce the monotonous, boredom and psychological imbalances. In this regard how colour creates variety and ideal colour concepts/ schemes that reflect a sense of harmony is also studied.

The background information was collected from various sources. A literature review on collected information was formulated.

The survey was an important part of the research, done by collecting data on four different examples. (Harsha international pvt ltd., Hem Tours , HNB – Boralesgamuwa , Jetwing Travels)

A questionnaire survey was carried out by interviewing users and architects. The analysis is based on responses from both architects and the users and according to test types (a check list of qualities) identified in the third chapter.

The study was based on case studies. These were selected to illustrate different types of office buildings. The case studies were used to determine the following:

1. Study the use of colour with regard to its physical, perceptual and conceptual qualities of architectural space.
2. Study the existing situation of case studies and analyse, how colour theory is applied on the architectural space.
3. Identify the colour in architectural space and Its Impact on the User by a questionnaire and test types. (Check list)

The findings and their analysis are presented in the dissertation in the fourth chapter

6) Scope and Limitations

This dissertation is limited to a study of using colour and its impact on the user, with regard to different contemporary offices in Sri Lanka. Hence, the usage of colours in internal spaces of buildings affects the user's moods were due to long occupation time of the space. Therefore, internal spaces are highlighted in the study. However, external colour usage is also considered in the study.

The analysis is based on 'case studies'. Therefore, examples were selected from different local Architects who have used colours to achieve different concepts.

- Questionnaire is limited to 50 persons on each case study.
- Use of architectural terms in the questionnaire, is limited to the understanding of the general public.
- Two interior spaces and two-block buildings were selected for the case studies.
- Test types (Check list) such as spatial arrangement, Form and Space, Scale and Proportion, Volume, Architectural Detailing, Lighting are used to analyze the impact on the user.

It should be mentioned that the two dimensional photographs and drawings might not be very successful in conveying the true quality of three-dimensional space.